

# INTERNATIONAL SEARCH REPORT

PCT/GB2004/005030

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K31/55 A61P29/00 A61P25/28 A61P37/00 A61P19/10  
C07D223/10

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, EMBASE, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DAVIDSON BRADLEY S ET AL: "Isolation and synthesis of caprolactins A and B, new caprolactams from a marine bacterium" TETRAHEDRON, vol. 49, no. 30, 1993, pages 6569-6574, XP002320426 ISSN: 0040-4020 abstract page 6569, paragraph 1 page 6571, last paragraph ----- -/--	1-6,8, 19-22

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

9 March 2005

Date of mailing of the international search report

22. 06. 2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Langer, 0

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	SEIFFERT D ET AL: "Presenilin-1 and -2 are molecular targets for gamma-secretase inhibitors." THE JOURNAL OF BIOLOGICAL CHEMISTRY. 3 NOV 2000, vol. 275, no. 44, 3 November 2000 (2000-11-03), pages 34086-34091, XP002320427 ISSN: 0021-9258 scheme 1 on page 34087	5,6,8, 10,11, 21,22
X	----- WO 98/07694 A (NOVARTIS AG; GERSPACHER, MARC; VON SPRECHER, ANDREAS; MAH, ROBERT; ROG) 26 February 1998 (1998-02-26) page 1 - page 3, paragraph 3 page 3, paragraph 5 - page 5, paragraph 3 claims 1-14	1
X	----- EP 1 008 346 A (SUNTORY LIMITED; DAIICHI SUNTORY PHARMA CO., LTD) 14 June 2000 (2000-06-14) paragraph [0022] paragraph [0024] - paragraph [0028] page 58 paragraph [0200]	1
X	----- US 5 852 007 A (CHATTERJEE ET AL) 22 December 1998 (1998-12-22) column 64; example 108	1
X	----- US 5 821 231 A (ARRHENIUS ET AL) 13 October 1998 (1998-10-13) table 1 claims 20-25	1
X	----- WO 01/68655 A (ARIAD PHARMACEUTICALS, INC; DEPREZ, PIERRE; LESUISSE, DOMINIQUE; BENAR) 20 September 2001 (2001-09-20) page 11, line 5 - line 19 claims 13,24 claims 18-20	1
X	----- EP 0 351 856 A (TAKEDA CHEMICAL INDUSTRIES, LTD) 24 January 1990 (1990-01-24) Chart II on page 7	5,8,10, 11,21,22
A	----- WO 98/17680 A (ZENECA LIMITED; LUKE, RICHARD, WILLIAM, ARTHUR; COTTON, RONALD) 30 April 1998 (1998-04-30) claims 1,8,11-13	1-24,26
A	----- US 6 344 450 B1 (BISACCHI GREGORY S ET AL) 5 February 2002 (2002-02-05) Chart II on page 7 the whole document	1-24,26

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## Box II Observations where certain claims were found unsearchable (Continuation of Item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
**Although claim 20 and claims 21-23, as far as relating to a method of treatment, are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.**
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of Item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  
**1-6, 10, 11, 16, 18-20 (all partially), 7-9, 12-15, 17, 21-24, 26**

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 7-9, 12-15, 17, 21-24, 26 and partially 1-6, 10, 11, 16, 18-20

Compounds, pharmaceutical compositions and uses according to the above claims with the exception of those cases where (a) R1 and R2 are "peptido radicals"; or (b) the R1 radical has an alpha-carbon which is substituted with one or two of the same or different groups selected from alkoxy, haloalkoxy and alkylamino; or (c) R1-C(=O) is one of the groups 11'-azido-undecanoyl; (2'S, 3'R)-3'-hydroxy-2'-methyldecanoyl; (2'R, 3'S)-3'-hydroxy-2'-methyldecanoyl, (3'R)-3'-hydroxy-2',2'-dimethyldecanoyl, (3'S)-3'-hydroxy-2',2'-dimethyldecanoyl, and 2',2'-dimethyl-3'-hydroxypropionyl.

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2. claims: 10, 11, 16 and 18 (all partially)

Compounds, pharmaceutical compositions and uses according to the above claims wherein R1 and R2 are not "peptido radicals" and where (a) the R1 radical has an alpha-carbon which is substituted with one or two of the same or different groups selected from alkoxy, haloalkoxy and alkylamino; and/or (b) R1-C(=O) is one of the groups 11'-azido-undecanoyl; (2'S, 3'R)-3'-hydroxy-2'-methyldecanoyl; (2'R, 3'S)-3'-hydroxy-2'-methyldecanoyl, (3'R)-3'-hydroxy-2',2'-dimethyldecanoyl, (3'S)-3'-hydroxy-2',2'-dimethyldecanoyl, and 2',2'-dimethyl-3'-hydroxypropionyl.

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3. claims: 1-6, 19, 20 (all partially)

Compounds, pharmaceutical compositions and uses according to the above claims wherein R1 and R2 are "peptido radicals", as far as not comprised within one of the former inventions.

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4. claim: 25

Synthetic intermediates of claim 25.

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Information on patent family members

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